

**Kentucky Power Company**

**REQUEST**

If not provided in response to the previous data request, please provide all work papers supporting the development of the monthly coincident peaks by rate class, including adjustments from load research sample data to adjusted test year data, and any other adjustment to census class data.

**RESPONSE**

The monthly coincident peaks by class/voltage were provided in response to the Attorney General-1st Set, Question No. 182. No adjustments were made to the load research data.

**WITNESS Larry C. Foust**



**Kentucky Power Company**

**REQUEST**

Please provide the loss factors used for each rate class and voltage level to adjust the class demands and energy from meter level to the voltage levels used for cost allocation purposes.

**RESPONSE**

Please see the attached 4 pages.

**WITNESS Larry C. Foust**

**Loss Allocation Study**  
**Kentucky Power**  
 Year Ending December 31, 2004

Actual peak internal demand occurred 12/20/2004 at 09:00 hours: 1615.0 MW

**Transmission**

Variable Loss 41.0  
 Fixed Loss 9.6  
 Load 1425.6

% Demand Loss  
 Variable 2.9%  
 Fixed 0.7%  
 Total 3.5%

Load Factor 0.5491  
 Loss Factor 0.3140  
 % Energy Loss 2.9%

**Subtransmission**

Variable Loss 19.3  
 Fixed Loss 2.6  
 Load 1230.1

% Demand Loss  
 Regular Adjusted  
 Variable 1.6%  
 Fixed 0.2%  
 Total 1.8% 1.4%

Load Factor Regular Adjusted  
 0.5685  
 Loss Factor 0.3370  
 % Energy Loss 1.3% 1.0%

*% Primary Load from Subtran =*

$$\frac{.014 \text{ Adj.}}{.018 \text{ Reg.}} = .7777 = .78$$



KENTUCKY POWER COMPANY  
 TWELVE MONTHS ENDED JUNE 30, 2005  
 LOSS EQUATION VARIABLES

FUNCTIONAL LEVEL (1)	YEAR (2)	MONTH (3)	DATE (4)	HOUR (5)	ANNUAL MAXIMUM (6)	MAXIMUM LOSS AMOUNT (7)	LOSS COEFFICIENT (8)	ZERO LOAD LOSSES (9)
SECONDARY	5	1	24	10	995,407	27,871	0.000000022102	5,972
PRIMARY	5	1	24	10	1,075,943	37,658	0.000000051600	1,076
SUBTRANSMISSION	4	12	20	9	1,206,839	21,723	0.000000013257	2,414
TRANSMISSION	5	1	18	9	1,513,070	52,957	0.000000018505	10,591
GENERATION	5	1	18	9	1,566,026	0	0.000000000000	0

KENTUCKY POWER COMPANY  
 TWELVE MONTHS ENDED JUNE 30, 2005  
 COMPOSITE LOSS FACTOR SUMMARY

VOLTAGE (1)	METERED		AT GENERATION		LOSS FACTOR TO GENERATION	
	DEMAND (2)	ENERGY (3)	DEMAND (4)	ENERGY (5)	DEMAND (6)	ENERGY (7)
SECONDARY	657,814	3,627,512,222	721,962	3,934,430,243	1.09752	1.08461
PRIMARY	54,006	384,284,803	57,737	406,314,030	1.06908	1.05733
SUBTRANSMISSION	345,721	2,742,575,071	361,641	2,857,102,898	1.04605	1.04176
TRANSMISSION	30,780	281,519,990	31,720	289,576,589	1.03056	1.02862

VOLTAGE (1)	COMPOSITE LOSS FACTORS							
	TO SECONDARY		TO PRIMARY		TO SUBTRAN		TO TRAN	
	DEMAND (2)	ENERGY (3)	DEMAND (4)	ENERGY (5)	DEMAND (6)	ENERGY (7)	DEMAND (8)	ENERGY (9)
SECONDARY	1.00000	1.00000	1.02660	1.02580	1.04920	1.04113	1.06497	1.05443
PRIMARY	0.97409	0.97485	1.00000	1.00000	1.02202	1.01495	1.03738	1.02791
SUBTRANSMISSION	0.95310	0.96049	0.97846	0.98527	1.00000	1.00000	1.01503	1.01277
TRANSMISSION	0.93899	0.94838	0.96397	0.97285	0.98519	0.98739	1.00000	1.00000



**Kentucky Power Company**

**REQUEST**

Please provide the loss study which was used to develop the loss factors referenced in the previous data request.

**RESPONSE**

Please see the response to KIUC Question No. 97.

**WITNESS Larry C. Foust**



**Kentucky Power Company**

**REQUEST**

Please provide all electronic spreadsheets supporting Roush Exhibit DMR-2, with formulas intact.

**RESPONSE**

Please see the enclosed CD for the requested Excel spreadsheet.

**WITNESS David M. Roush**



**Kentucky Power Company**

**REQUEST**

Please explain what criteria were used by the Company in determining that the appropriate subsidy reduction was 10% (Roush page 7)

**RESPONSE**

The Company's choice to reduce subsidies 10%, was based upon the balancing of the objective to eliminate interclass subsidies against the rate impacts caused by such elimination.

**WITNESS David M. Roush**



**Kentucky Power Company**

**REQUEST**

Please provide all work papers supporting the development of the proposed voltage differentials in the Q.P. and C.I.P.-T.O.D. rates.

**RESPONSE**

Please see the Company's response to Commission Staff-1st Set, Request No. 8-c, pages 27 through 38.

**WITNESS David M. Roush**